M●E

0400
4-24-01, 0280

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/814,604

DATE: 04/05/2001
TIME: 08:13:03

Input Set : A:\Ar4528.txt
Output Set: N:\CRF3\04052001\I814604.raw

P.5 # 2.

ENTERED

```
 4 <110> APPLICANT: Klein, Elliott S.
 5        Chandraratna Roshantha A.
 7 <120> TITLE OF INVENTION: Methods of Detecting Dissociated Nuclear
 8        Hormone Receptor Ligands
11 <130> FILE REFERENCE: P-AR 4528
13 <140> CURRENT APPLICATION NUMBER: US/09/814,604
13 <141> CURRENT FILING DATE: 2001-03-22
13 <160> NUMBER OF SEQ ID NOS: 52
15 <170> SOFTWARE: FastSEQ for Windows Version 4.0
17 <210> SEQ ID NO: 1
18 <211> LENGTH: 462
19 <212> TYPE: PRT
20 <213> ORGANISM: Homo sapiens
22 <400> SEQUENCE: 1
23 Met Ala Ser Asn Ser Ser Ser Cys Pro Thr Pro Gly Gly Gly His Leu
24 1               5               10              15
25 Asn Gly Tyr Pro Val Pro Pro Tyr Ala Phe Phe Phe Pro Pro Met Leu
26         20              25              30
27 Gly Gly Leu Ser Pro Pro Gly Ala Leu Thr Thr Leu Gln His Gln Leu
28         35              40              45
29 Pro Val Ser Gly Tyr Ser Thr Pro Ser Pro Ala Thr Ile Glu Thr Gln
30         50              55              60
31 Ser Ser Ser Ser Glu Glu Ile Val Pro Ser Pro Pro Ser Pro Pro Pro
32 65              70              75              80
33 Leu Pro Arg Ile Tyr Lys Pro Cys Phe Val Cys Gln Asp Lys Ser Ser
34         85              90              95
35 Gly Tyr His Tyr Gly Val Ser Ala Cys Glu Gly Cys Lys Gly Phe Phe
36         100             105             110
37 Arg Arg Ser Ile Gln Lys Asn Met Val Tyr Thr Cys His Arg Asp Lys
38         115             120             125
39 Asn Cys Ile Ile Asn Lys Val Thr Arg Asn Arg Cys Gln Tyr Cys Arg
40         130             135             140
41 Leu Gln Lys Cys Phe Glu Val Gly Met Ser Lys Glu Ser Val Arg Asn
42 145             150             155             160
43 Asp Arg Asn Lys Lys Lys Lys Glu Val Pro Lys Pro Glu Cys Ser Glu
44         165             170             175
45 Ser Tyr Thr Leu Thr Pro Glu Val Gly Glu Leu Ile Glu Lys Val Arg
46         180             185             190
47 Lys Ala His Gln Glu Thr Phe Pro Ala Leu Cys Gln Leu Gly Lys Tyr
48         195             200             205
49 Thr Thr Asn Asn Ser Ser Glu Gln Arg Val Ser Leu Asp Ile Asp Leu
50 210             215             220
51 Trp Asp Lys Phe Ser Glu Leu Ser Thr Lys Cys Ile Ile Lys Thr Val
52 225             230             235             240
53 Asp Phe Ala Lys Gln Leu Pro Gly Phe Thr Thr Leu Thr Ile Ala Asp
54         245             250             255
55 Gln Ile Thr Leu Leu Lys Ala Ala Cys Leu Asp Ile Leu Ile Leu Arg
```

RAW SEQUENCE LISTING   DATE: 04/05/2001
PATENT APPLICATION: US/09/814,604   TIME: 08:13:03

Input Set : A:\Ar4528.txt
Output Set: N:\CRF3\04052001\I814604.raw

```
56              260             265             270
57 Ile Cys Thr Arg Tyr Thr Pro Glu Gln Asp Thr Met Thr Phe Ser Asp
58          275             280             285
59 Gly Leu Thr Leu Asn Arg Thr Gln Met His Asn Ala Gly Phe Gly Pro
60          290             295             300
61 Leu Thr Asp Leu Val Phe Ala Phe Ala Asn Gln Leu Leu Pro Leu Glu
62 305             310             315             320
63 Met Asp Asp Ala Glu Thr Gly Leu Leu Ser Ala Ile Cys Leu Ile Cys
64          325             330             335
65 Gly Asp Arg Gln Asp Leu Glu Gln Pro Asp Arg Val Asp Met Leu Gln
66          340             345             350
67 Glu Pro Leu Leu Glu Ala Leu Lys Val Tyr Val Arg Lys Arg Arg Pro
68          355             360             365
69 Ser Arg Pro His Met Phe Pro Lys Met Leu Met Lys Ile Thr Asp Leu
70          370             375             380
71 Arg Ser Ile Ser Ala Lys Gly Ala Glu Arg Val Ile Thr Leu Lys Met
72 385             390             395             400
73 Glu Ile Pro Gly Ser Met Pro Pro Leu Ile Gln Glu Met Leu Glu Asn
74          405             410             415
75 Ser Glu Gly Leu Asp Thr Leu Ser Gly Gln Pro Gly Gly Gly Gly Arg
76          420             425             430
77 Asp Gly Gly Gly Leu Ala Pro Pro Gly Ser Cys Ser Pro Ser Leu
78          435             440             445
79 Ser Pro Ser Ser Asn Arg Ser Ser Pro Ala Thr His Ser Pro
80          450             455             460
83 <210> SEQ ID NO: 2
84 <211> LENGTH: 448
85 <212> TYPE: PRT
86 <213> ORGANISM: Homo sapiens
88 <400> SEQUENCE: 2
89 Met Phe Asp Cys Met Asp Val Leu Ser Val Ser Pro Gly Gln Ile Leu
90 1               5               10              15
91 Asp Phe Tyr Thr Ala Ser Pro Ser Ser Cys Met Leu Gln Glu Lys Ala
92          20              25              30
93 Leu Lys Ala Cys Phe Ser Gly Leu Thr Gln Thr Glu Trp Gln His Arg
94          35              40              45
95 His Thr Ala Gln Ser Ile Glu Thr Gln Ser Thr Ser Ser Glu Glu Leu
96          50              55              60
97 Val Pro Ser Pro Pro Ser Pro Leu Pro Pro Arg Val Tyr Lys Pro
98 65              70              75              80
99 Cys Phe Val Cys Gln Asp Lys Ser Ser Gly Tyr His Tyr Gly Val Ser
100         85              90              95
101 Ala Cys Glu Gly Cys Lys Gly Phe Phe Arg Arg Ser Ile Gln Lys Asn
102         100             105             110
103 Met Ile Tyr Thr Cys His Arg Asp Lys Asn Cys Val Ile Asn Lys Val
104         115             120             125
105 Thr Arg Asn Arg Cys Gln Tyr Cys Arg Leu Gln Lys Cys Phe Glu Val
106         130             135             140
107 Gly Met Ser Lys Glu Ser Val Arg Asn Asp Arg Asn Lys Lys Lys Lys
```

RAW SEQUENCE LISTING   DATE: 04/05/2001
PATENT APPLICATION: US/09/814,604   TIME: 08:13:03

Input Set : A:\Ar4528.txt
Output Set: N:\CRF3\04052001\I814604.raw

```
108 145                   150                   155                   160
109 Glu Thr Ser Lys Gln Glu Cys Thr Glu Ser Tyr Glu Met Thr Ala Glu
110             165                   170                   175
111 Leu Asp Asp Leu Thr Glu Lys Ile Arg Lys Ala His Gln Glu Thr Phe
112             180                   185                   190
113 Pro Ser Leu Cys Gln Leu Ala Lys Tyr Thr Thr Asn Ser Ser Ala Asp
114             195                   200                   205
115 His Arg Val Arg Leu Asp Leu Gly Leu Trp Asp Lys Phe Ser Glu Leu
116         210                   215                   220
117 Ala Thr Lys Cys Ile Ile Lys Ile Val Glu Phe Ala Lys Arg Leu Pro
118 225                   230                   235                   240
119 Gly Phe Thr Gly Leu Thr Ile Ala Asp Gln Ile Thr Leu Leu Lys Ala
120             245                   250                   255
121 Ala Cys Leu Asp Ile Leu Ile Leu Arg Ile Cys Thr Arg Tyr Thr Pro
122             260                   265                   270
123 Glu Gln Asp Thr Met Thr Phe Ser Asp Gly Leu Thr Leu Asn Arg Thr
124             275                   280                   285
125 Gln Met His Asn Ala Gly Phe Gly Pro Leu Thr Asp Leu Val Phe Thr
126         290                   295                   300
127 Phe Ala Asn Gln Leu Leu Pro Leu Glu Met Asp Asp Thr Glu Thr Gly
128 305                   310                   315                   320
129 Leu Leu Ser Ala Ile Cys Leu Ile Cys Gly Asp Arg Gln Asp Leu Glu
130             325                   330                   335
131 Glu Pro Thr Lys Val Asp Lys Leu Gln Glu Pro Leu Leu Glu Ala Leu
132             340                   345                   350
133 Lys Ile Tyr Ile Arg Lys Arg Arg Pro Ser Lys Pro His Met Phe Pro
134             355                   360                   365
135 Lys Ile Leu Met Lys Ile Thr Asp Leu Arg Ser Ile Ser Ala Lys Gly
136         370                   375                   380
137 Ala Glu Arg Val Ile Thr Leu Lys Met Glu Ile Pro Gly Ser Met Pro
138 385                   390                   395                   400
139 Pro Leu Ile Gln Glu Met Met Glu Asn Ser Glu Gly His Glu Pro Leu
140             405                   410                   415
141 Thr Pro Ser Ser Ser Gly Asn Thr Ala Glu His Ser Pro Ser Ile Ser
142             420                   425                   430
143 Pro Ser Ser Val Glu Asn Ser Gly Val Ser Gln Ser Pro Leu Val Gln
144         435                   440                   445
147 <210> SEQ ID NO: 3
148 <211> LENGTH: 454
149 <212> TYPE: PRT
150 <213> ORGANISM: Homo sapiens
152 <400> SEQUENCE: 3
153 Met Ala Thr Asn Lys Glu Arg Leu Phe Ala Ala Gly Ala Leu Gly Pro
154 1                   5                   10                   15
155 Gly Ser Gly Tyr Pro Gly Ala Gly Phe Pro Phe Ala Phe Pro Gly Ala
156             20                   25                   30
157 Leu Arg Gly Ser Pro Pro Phe Glu Met Leu Ser Pro Ser Phe Arg Gly
158         35                   40                   45
159 Leu Gly Gln Pro Asp Leu Pro Lys Glu Met Ala Ser Leu Ser Val Glu
```

RAW SEQUENCE LISTING　　　　　　　　DATE: 04/05/2001
PATENT APPLICATION: US/09/814,604　　TIME: 08:13:03

Input Set : A:\Ar4528.txt
Output Set: N:\CRF3\04052001\I814604.raw

```
160        50                    55                    60
161 Thr Gln Ser Thr Ser Ser Glu Glu Met Val Pro Ser Ser Pro Ser Pro
162 65                    70                    75                    80
163 Pro Pro Pro Pro Arg Val Tyr Lys Pro Cys Phe Val Cys Asn Asp Lys
164            85                    90                    95
165 Ser Ser Gly Tyr His Tyr Gly Val Ser Ser Cys Glu Gly Cys Lys Gly
166            100                   105                   110
167 Phe Phe Arg Arg Ser Ile Gln Lys Asn Met Val Tyr Thr Cys His Arg
168            115                   120                   125
169 Asp Lys Asn Cys Ile Ile Asn Lys Val Thr Arg Asn Arg Cys Gln Tyr
170        130                   135                   140
171 Cys Arg Leu Gln Lys Cys Phe Glu Val Gly Met Ser Lys Glu Ala Val
172 145                   150                   155                   160
173 Arg Asn Asp Arg Asn Lys Lys Lys Lys Glu Val Lys Glu Glu Gly Ser
174            165                   170                   175
175 Pro Asp Ser Tyr Glu Leu Ser Pro Gln Leu Glu Glu Leu Ile Thr Lys
176            180                   185                   190
177 Val Ser Lys Ala His Gln Glu Thr Phe Pro Ser Leu Cys Gln Leu Gly
178            195                   200                   205
179 Lys Tyr Thr Thr Asn Ser Ser Ala Asp His Arg Val Gln Leu Asp Leu
180        210                   215                   220
181 Gly Leu Trp Asp Lys Phe Ser Glu Leu Ala Thr Lys Cys Ile Ile Lys
182 225                   230                   235                   240
183 Ile Val Glu Phe Ala Lys Arg Leu Pro Gly Phe Thr Gly Leu Ser Ile
184            245                   250                   255
185 Ala Asp Gln Ile Thr Leu Leu Lys Ala Ala Cys Leu Asp Ile Leu Met
186            260                   265                   270
187 Leu Arg Ile Cys Thr Arg Tyr Thr Pro Glu Gln Asp Thr Met Thr Phe
188            275                   280                   285
189·Ser Asp Gly Leu Thr Leu Asn Arg Thr Gln Met His Asn Ala Gly Phe
190        290                   295                   300
191 Gly Pro Leu Thr Asp Leu Val Phe Ala Phe Ala Gly Gln Leu Leu Pro
192 305                   310                   315                   320
193 Leu Glu Met Asp Asp Thr Glu Thr Gly Leu Leu Ser Ala Ile Cys Leu
194            325                   330                   335
195 Ile Cys Gly Asp Arg Met Asp Leu Glu Glu Pro Glu Lys Val Asp Lys
196            340                   345                   350
197 Leu Gln Glu Pro Leu Leu Glu Ala Leu Arg Leu Tyr Ala Arg Arg Arg
198            355                   360                   365
199 Arg Pro Ser Gln Pro Tyr Met Phe Pro Arg Met Leu Met Lys Ile Thr
200        370                   375                   380
201 Asp Leu Arg Gly Ile Ser Thr Lys Gly Ala Glu Arg Ala Ile Thr Leu
202 385                   390                   395                   400
203 Lys Met Glu Ile Pro Gly Pro Met Pro Pro Leu Ile Arg Glu Met Leu
204            405                   410                   415
205 Glu Asn Pro Glu Met Phe Glu Asp Asp Ser Ser Gln Pro Gly Pro His
206            420                   425                   430
207 Pro Asn Ala Ser Ser Glu Asp Glu Val Pro Gly Gly Gln Gly Lys Gly
208            435                   440                   445
```

```
                RAW SEQUENCE LISTING              DATE: 04/05/2001
                PATENT APPLICATION:  US/09/814,604   TIME: 08:13:03

                Input Set : A:\Ar4528.txt
                Output Set: N:\CRF3\04052001\I814604.raw

  209  Gly Leu Lys Ser Pro Ala
  210      450
  213  <210> SEQ ID NO: 4
  214  <211> LENGTH: 9
  215  <212> TYPE: PRT
  216  <213> ORGANISM: Artificial Sequence
  218  <220> FEATURE:
  219  <223> OTHER INFORMATION: synthetic peptide
  221  <221> NAME/KEY: VARIANT
  222  <222> LOCATION: (1)...(9)
  223  <223> OTHER INFORMATION: Xaa = Any Amino Acid
  225  <221> NAME/KEY: VARIANT
  226  <222> LOCATION: (1)...(9)
  227  <223> OTHER INFORMATION: Xaa = Any Amino Acid
  229  <400> SEQUENCE: 4
  230  Leu Xaa Xaa Ile Ile Xaa Xaa Xaa Leu
  231  1               5
  234  <210> SEQ ID NO: 5
  235  <211> LENGTH: 8
  236  <212> TYPE: PRT
  237  <213> ORGANISM: Artificial Sequence
  239  <220> FEATURE:
  240  <223> OTHER INFORMATION: synthetic peptide
  242  <400> SEQUENCE: 5
  243  Asp Tyr Lys Asp Asp Asp Asp Lys
  244  1               5
  247  <210> SEQ ID NO: 6
  248  <211> LENGTH: 9
  249  <212> TYPE: PRT
  250  <213> ORGANISM: Artificial Sequence
  252  <220> FEATURE:
  253  <223> OTHER INFORMATION: synthetic peptide
  255  <400> SEQUENCE: 6
  256  Tyr Pro Tyr Asp Val Pro Asp Tyr Ala
  257  1               5
  260  <210> SEQ ID NO: 7
  261  <211> LENGTH: 10
  262  <212> TYPE: PRT
  263  <213> ORGANISM: Artificial Sequence
  265  <220> FEATURE:
  266  <223> OTHER INFORMATION:  synthetic peptide
  268  <400> SEQUENCE: 7
  269  Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu
  270  1               5                 10
  273  <210> SEQ ID NO: 8
  274  <211> LENGTH: 6
  275  <212> TYPE: PRT
  276  <213> ORGANISM: Artificial Sequence
  278  <220> FEATURE:
```

Please Note:
Use f n and/ r Xaa have been detected in the Sequence Listing. Please review the Sequence Listing t   ensure that a corresp nding explanation is presented in the <220> t <223> fields f each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY   DATE: 04/05/2001
PATENT APPLICATION: **US/09/814,604**   TIME: 08:13:04

Input Set : **A:\Ar4528.txt**
Output Set: **N:\CRF3\04052001\I814604.raw**

```
L:13 M:270 C: Current Application Number differs, Replaced Current Application No
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:230 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:312 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:327 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:342 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:357 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:372 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:387 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:402 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:428 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
```